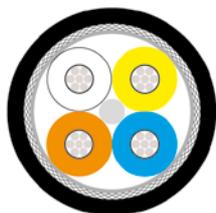


# HELUKAT® 100IND CAT.5 WK SF/UTP X-FRNC FLEX

null, null, flame-retardant, low smoke



## TECHNICAL DATA

Industrial Ethernet cable / Cat. 5 acc. to ISO/IEC 11801, DIN EN 50173, IEC 61156-3, DIN EN 50288-2-2, UL-Std. 758 (AWM) Style 21281

<b>Temperature range</b>	flexible -20°C to +60°C fixed installation -40°C to +105°C UL (AWM) to +80°C
<b>Peak operating voltage</b>	125 V (not for high power current installation purposes)
<b>Test voltage core/core</b>	2000 V
<b>Conductor resistance at 20°C</b>	max. 60.0 Ohm/km
<b>Loop resistance at 20°C</b>	max. 120.0 Ohm/km
<b>Insulation resistance</b>	min. 0.5 GOhm x km
<b>Mutual capacitance core/core</b>	at 800 Hz, approx. 57 pF/m
<b>Rel. Velocity of Propagation</b>	approx. 69%
<b>Characteristic impedance</b>	at 1 to 100 MHz, 100 Ohm ± 15 Ohm
<b>Caloric load</b>	approx. 0.89 MJ/m
<b>Minimum bending radius</b>	fixed 8x Outer-Ø fixed installation 4x Outer-Ø

## CABLE STRUCTURE

- Copper wire tinned, AWG sizes
- Core insulation: XLPE
- Core identification: white, yellow, blue, orange
- Cores twisted into a star quad with optimal lay lengths
- Foil wrapping
- 1. Screen: plastic-coated aluminium foil (St)
- 2. Screen: braided screen of tinned copper wires
- Outer sheath: cross-linkable, halogen-free, flame retardant compound (X-FRNC)
- Sheath colour: black

- Length marking: in metres

## PROPERTIES

- resistant to: oil, UV radiation, microbes, coolants, acids, alkalis
- abrasion-resistant, notch-resistant, low adhesion
- for outdoor use
- halogen-free
- flame-retardant, low smoke development

## TESTS

- halogen-free acc. to DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
- corrosiveness of combustion gases acc. to DIN VDE 0482-754-2 / DIN EN 60754-2 / IEC 60754-2
- bundle fire test acc. to DIN VDE 0482-332-3 / DIN EN 60332-3 / IEC 60332-3
- certifications and approvals: EAC

## APPLICATION

HELUKAT® 100IND CAT.5 WK SF/UTP X-FRNC FLEX is designed specially for demanding temperature requirements such as those encountered in wind turbines. Radiation cross-linking provides improved thermal stability as well as good oil resistance.

## NOTES

- Conductor sizes are based on the AWG measurement system, metric conductor sizes (mm<sup>2</sup>) are approximated and are for reference only
- Temperature range up to +105°C, for an operating period of max. 5000h
- UL Voltage Rating: 300 V

## TYPICAL VALUES

Frequency (MHz)	10	16	62.5	100
Attenuation (dB/100m)	6.3	8.0	16.5	21.3
NEXT (dB)	70.0	65.0	55.0	50.0
ACR (dB/100m)	63.7	57.0	38.5	28.7

Part no.	No. cores x AWG-No.	Cross-sec. mm <sup>2</sup> , approx.	Conductor Ø mm, approx.	Core Ø mm, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
802293	2 x 2 x AWG 22 /7	0.35	0.75	1.55	6.5	34.0	64.0